UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,726	06/24/2005	Hjalmar Edzer Ayco Huitema	NL02 1468 US	9121

24738 7590 11/14/2007

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
INTELLECTUAL PROPERTY & STANDARDS
370 W. TRIMBLE ROAD MS 91/MG
SAN JOSE, CA 95131

EXAMINER	
HAILEMARIAM, EMMANUEL	
ART UNIT	**PAPER NUMBER**
2629	

MAIL DATE	DELIVERY MODE
11/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,726	HUITEMA ET AL.	
	Examiner	Art Unit	
	Emmanuel Hailemariam	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/24/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

Arrangement of the Specification

1. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.

(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING (S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if

the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 8 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The term "substantially" in claim 8 and 14 is a relative term, which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Objections

5. Claim 1,12 are objected to because of the following informalities:

In claim 1, lines 6,the capacitive" should be "at least **one** of a capacitive".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 1 –20 are** rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda et al. (4952031).

As to claim 1,Tsunoda discloses a system comprising a carrier and a matrix display with a substrate and display pixels, the display comprises display conductors for supplying display signals to the display pixels **(col.1 lines 46-53)**, the carrier comprising carrier conductors for carrying input signals **(col.3 lines 39-55)**, wherein the system further comprises means for at least on of a capacitive **(Fig.12 (C))**, inductive and optical transport of the input signals from the carrier conductors of the carrier to the display conductors of the display via the substrate **(col.13 lines 54-68).** Tsunoda does not expressly disclose optical transport of the input signals. However, Tsunoda teaches when the switch 16a is turned on, the scanning signal on the scanning signal bus 17a is supplied to the electrode 12a to which the switch 16a activated by the optical beam is connected **(col.8 lines 53-55).**

Therefore, it would have been obvious for one skill in the art at the time of the invention was made to have switch (16a) for transporting, because for switch 16a to function, the scanning single needs to be transported to reach electrode (12a) **(col.8 lines 53-55).**

As to claim 2, Tsunoda discloses wherein the means for capacitive inductive or optical transport comprise the display conductors and the carrier conductors being positioned with respect to each other to obtain a capacitor or mutually coupled inductors between associated ones of the display conductors and the carrier conductors to capacitively, or inductively transfer the input signals on the carrier conductors to the display conductors **(col.3 lines 39-55).**

As to claim 3, Tsunoda discloses wherein the carrier conductors and the display conductors are positioned at opposite sides of the substrate, the substrate forming a dielectric medium of the capacitor or a magnetic medium of the transformer **(fig.9) (10a, and 10b)).**

As to claim 4, Tsunoda discloses wherein a thickness of the substrate is less than 250 micron **(col. 19 lines 15-22).**

As to claim 5, Tsunoda discloses, wherein the substrate comprises glass or plastic **(fig.2) (12a, 12b); (col.7 lines 64-68 and col.8 lines 1-3).**

As to claim 6, Tsunoda discloses wherein the substrate is flexible **(fig.3 (10a)) (col. 6 lines 42-48).**

As to claim 7, Tsunoda discloses wherein associated ones of the carrier conductors and the display conductors have pads, which are oppositely positioned to form the capacitor **(fig.11 and 12 (c) col.15 lines 56-61).**

As to claim 8,Tsunoda discloses wherein the display comprises a further

substrate, the first mentioned substrate and the further substrate sandwiching the display pixels, a strip of glue being provided at edges of the first mentioned substrate and the further substrate for mechanically connecting the first mentioned substrate and the further mentioned substrate, the means for capacitive, inductive or optical transport being arranged to substantially coincident with the strip of glue **(fig.2) col. 7 lines 47-52).**

As to claim 9, Tsunoda discloses wherein the display comprises a buffer with a buffer input coupled to one of the display conductors to receive an associated one of the capacitively, inductively, or optically coupled input signals and a buffer output to supply the associated one of the display signals to the associated one of the display pixels, the buffer comprises a transistor having a control electrode for receiving the capacitively, inductively, or optically coupled input signals **(col. 14 lines 53-65).**

As to claim 10, Tsunoda discloses wherein the buffer comprises a first transistor **(fig.11 (Q)),** a second transistor **(fig.12 (Q'))**, and a third transistor **(fig.12 (Q)),** the first transistor **(fig.11 (Q))** has a control electrode coupled to the buffer input to receive the input signal, a first main electrode coupled to a first voltage level, and a second main electrode coupled to the buffer output to supply the display signal, the second transistor has a control electrode coupled to receive a clock signal, a first main electrode coupled to the buffer output, and a second main electrode coupled to a second voltage level being different than the first voltage level, and the third transistor has a control electrode coupled to receive the clock signal, a first main electrode coupled to the buffer input, and a second main electrode coupled to the second voltage

level **(col. 15 lines 7-55).**

As to claim 11, Tsunoda discloses wherein the display pixels are arranged in a matrix of columns and rows **(fig.1, col. 9 lines 45-50))**, the system further comprising a shift register for successively selecting a line of the pixels, or to supply a line of data to selected pixels, both in either the direction of the columns or the rows **(col. 4 lines 19-40).**

As to claim 12 Tsunoda discloses wherein the input signals comprise a clock signal and/or a reference level **((col. 15 lines 7-55).**

As to claim 13 Tsunoda discloses wherein the system comprises means for capacitively or inductively coupling power to the display **(fig.11 (C) and fig.12 (C)).**

As to claim 14, Tsunoda discloses wherein the means for capacitively or inductively coupling comprises two cooperating pads arranged at opposite sides of the substrate, and having an area to obtain a capacitor which is substantially larger than a capacitor required to transfer the input signals from the carrier conductors to the display conductors **(fig.9) (10a, and 10b)).**

As to claim 15, Tsunoda discloses wherein the means for capacitively or inductively coupling comprises two cooperating inductors arranged as tracks at opposite sides of the substrate **(fig.9) (10a, and 10b)).**

As to claim 16 Tsunoda discloses wherein the two cooperating inductors each form a closed loop **(fig.9 (26a), col. 13 lines 60-68)**.

As to claim 17 Tsunoda discloses wherein means for capacitive **(Fig.12 (C))**, inductive or optical transport comprises a light generating element on the carrier and a

orresponding light sensitive element on the display, the substrate being transparent to a light generated by the light generating element to obtain an optical transport from the light generating element to the light sensitive element **(col. 13 lines 7-11).**

As to claim 18 Tsunoda discloses a display apparatus comprising a system as claimed in claim 1 **(col. 4 lines 54-58)**.

As to claim 19 and 20, **Tsunoda discloses** a display comprising one of the two cooperating pads as claimed in claim 14, the display further comprises a rectifier for rectifying an AC-voltage when present at the one of the two cooperating pads/inductors **(col. 1 lines 14-20 and (col. 11 lines 40-46).**

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Hailemariam whose telephone number is 571-270-1545. The examiner can normally be reached on M-F 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-270-1550. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Emmanuel Hailemariam 10/19/07

AMARE MENGISTU
SUPERVISORY PATENT EXAMINER